and Bywaters say that the older observations on the obsorption of foodstuffs from rectal enemas based on the analysis of rectal "wash outs" are unreliable. The daily output of nitrogen in the urine of patients given nutrient enemas of milk or eggs peptonized for 20 to 30 minutes demonstrates that almost no nitrogenous matter is absorbed. Modern physiological opinion holds that proteins are absorbed principally as amino-acids. The failure of the rectum to absorb ordinary nutrient enemas is largely due to the fact that peptones are given instead of amino-acids. Chemically prepared amino-acids or milk pancreatinized for twenty-four hours so that amino-acids are separated, allows of a much better absorption of nitrogenous foodstuffs from the rectum as demonstrated in five cases by the high nitrogen output in the urine. The low output of ammonia nitrogen shows that the high output was not due to the absorption of putrefactive bodies. The rectal washings were not offensive. Dextrose is much better absorbed than lactose and relieves the acidosis due to starvation. Fat is not well absorbed. Scarcely any of the fat of ordinary milk enemas is retained. The best nutrient enema consists of milk pancreatinized for twenty-four hours, with the addition of 5 per cent. pure dextrose. They consider that the best form of nutrient enema should be prepared as follows: To a pint and a half of milk, boiled and cooled add one half an ounce of some reliable pancreatic fluid or four pancreatic tablets. Keep in the incubator twenty-four hours. Add one half an ounce of pure dextrose. Give five ounces every four hours, or, if the patient can retain it, ten ounces every eight hours.

PEDIATRICS

UNDER THE CHARGE OF

LOUIS STARR, M.D., AND THOMPSON S. WESTCOTT, M.D.,

OF PHILADELPHIA.

The Diagnosis and Treatment of Acute Mastoiditis.—George H. Mathewson (*Canadian Med. Assoc. Jour.*, 1913, iii, 672), puts into concrete form the current teachings on this subject. Acute mastoiditis resulting from, or accompanying middle ear disease is the form commonly seen; and as it can often be aborted in its incipient stage its early diagnosis is of vital importance. The presence of an acute or subacute otitis media is almost essential to the development and diagnosis of an acute mastoiditis. The symptoms of acute mastoiditis are tenderness on pressure over the mastoid process, pain in that region, edema and redness of the soft parts behind the auricle, in some cases abscess, prolapse of the posterior superior wall of the membranous meatus near the drum membrane, excessive, creamy, purulent discharge, and elevation of temperature. The most important symptom is tenderness over the mastoid process, especially just behind the external meatus, at the tip of the process, and less frequently about an inch behind the first point mentioned. Pain in the mastoid is not constant. Edema of the soft parts is frequent but is a late symptom. Furunculosis of the meatus quite as often causes edema here and may simulate mastoid tenderness if the meatus is pulled on while pressure is made over the mastoid. Prolapse of the postero-superior wall of the meatus if present is an indication for operation. If the purulent discharge is great it indicates mastoid involvement. Elevation of temperature is variable and not of much help in diagnosis, as 63 per cent. show a temperature not over 100° F. Prophylaxis is important. In cases of nasopharyngeal inflammation accompanying the exanthemas, cleansing gargles and application of 20 per cent. argyrol should be used. Occurrence of earache in healthy children demands thorough examination of the nose and throat. In existing cases, paracentesis of the drum is very valuable when the membrane is bulging, or if it does not rupture early, or if the existing perforation gives insufficient drainage. A general anesthetic, preferably nitrous oxide gas, should be given in all cases. From 50 per cent. to 75 per cent. of cases if treated early can be aborted by rest in bed, free purgation, establishing good drainage, syringing with hot boric acid solution every two hours, and the application of cold to the mastoid by means of a Leiter's coil. This treatment may be kept up for from twenty-four to forty-eight hours. If there is no marked improvement in forty-eight hours, operation is necessary.

Coli Infection of the Urinary Tract in Childhood.—N. Percy Marsh (*Brit. Jour. Child. Dis.*, 1913, x, 385) points out that the colon bacillus is usually the cause of cystitis and pyelitis in childhood. Many other organisms such as streptococci, gonococci, staphylococci, etc., occasionally are causal factors. Escherich found the bacillus coli in 58 of a series of 60 cases. Jeffreys reports 67 coli cases out of 121. The difficulty in infants with this condition is in gathering sufficient urine to make a diagnosis, the case often being diagnosed marasmus or tuberculosis. While there is much disagreement on the mode of entry into the urinary tract by the colon bacillus, the fact that 90 per cent. to 95 per cent. of cases occur in girls suggests a direct infection through rectal contamination. The habit of wiping with the diaper from behind forward makes this easy. Another method of infection is from the bowel to the kidney, direct, and many cases do follow ileocolitis, intestinal ulceration, and long-continued constipation. Infection through the blood-stream is another theory. Clinically four conditions are recognized: Bacilluria, the bacilli being found in the mucous clouds formed on standing. Cystitis, in which the urine contains motile organisms and pus cells, and there are dysuria, increased frequency, and slight fever. Pyelitis, in which the constitutional disturbance is greater, with often rigor, shivering, and high, remittent temperature. Lastly, pyelonephritis with severe general symptoms, pronounced wasting, and tube-casts and albumin in the urine besides the bacilli. In infancy the onset is usually sudden, often assuming a remittent type, like enteric, later on. Squint, head-retraction, and drowsiness may simulate meningitis, and local symptoms may be absent altogether. The urine is usually acid, shows a mucous sheen, and has an unpleasant fishy odor. General edema is often one of the